

Figure 1

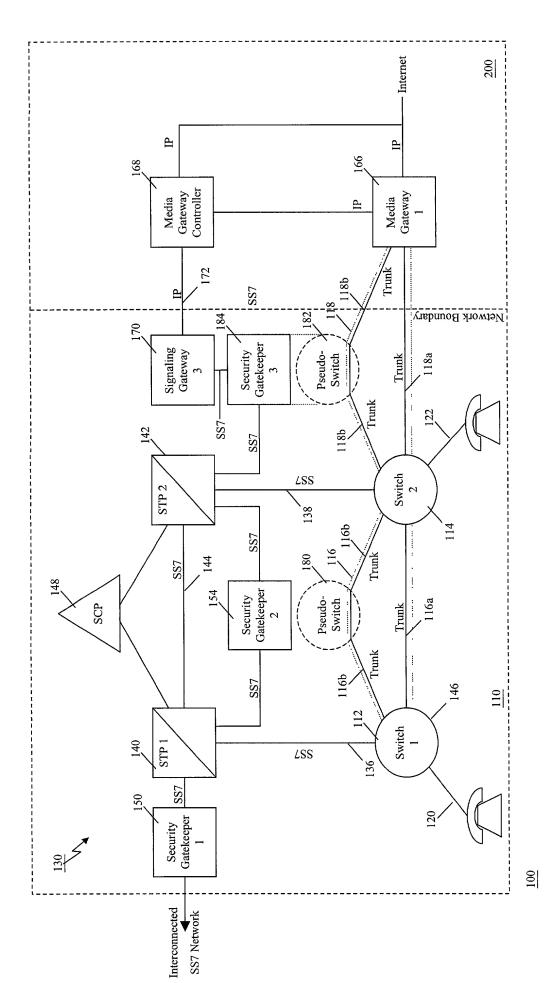


Figure 2

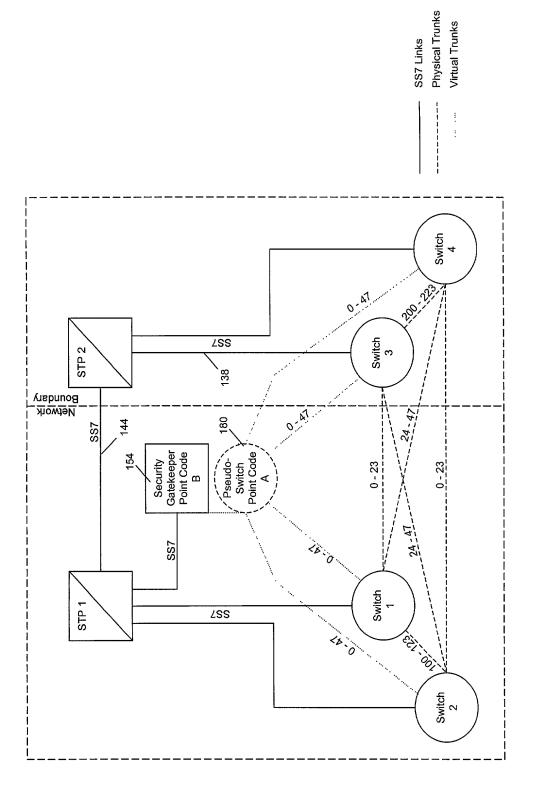


Figure 3

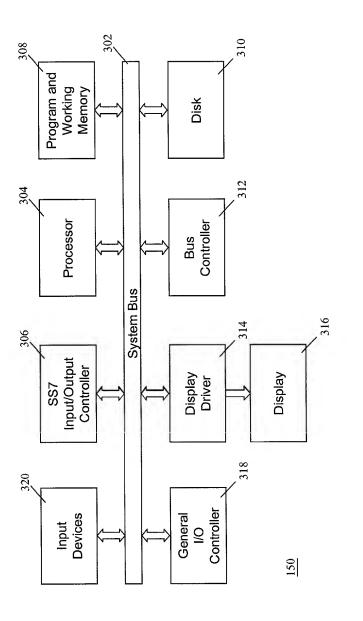


Figure 4

180

SS7 Protocol

Application	Presentation	Session	Transport	Network	Data Link	Physical

	ISUP				
OMAP	TCAP/ASP	SCCP	MTP - L3	MTP - L2	MTP - L1
TCAP	TCAP/ASP				

ASP - Application Service Part (Connection Oriented Protocols MTP - Message Transfer Part (L1, L2 & L3)
OMAP - Operations, Maintenance, Application Part SCCP - Signaling Connection Control Part TCAP - Transaction Capability Application Part

Figure 5

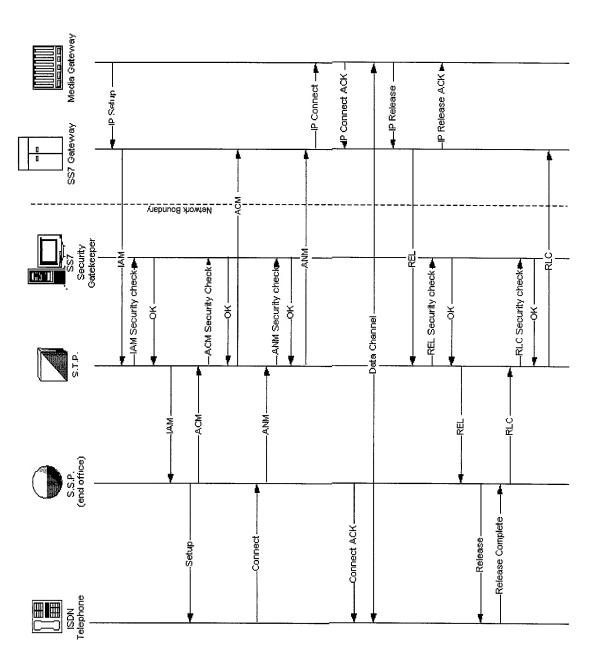


Figure 6

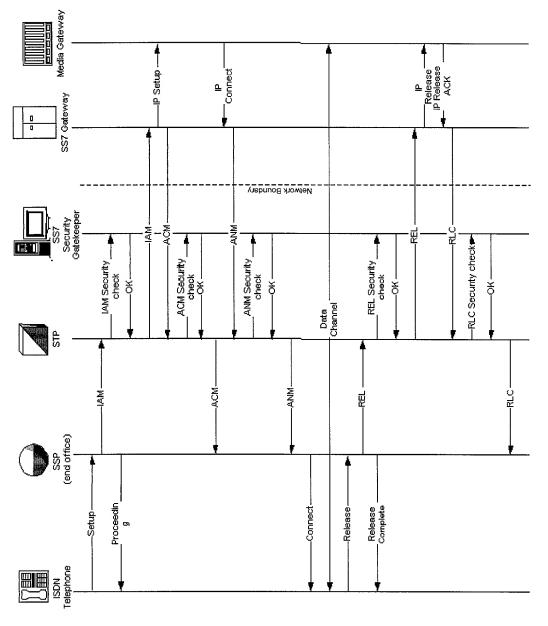


Figure 7

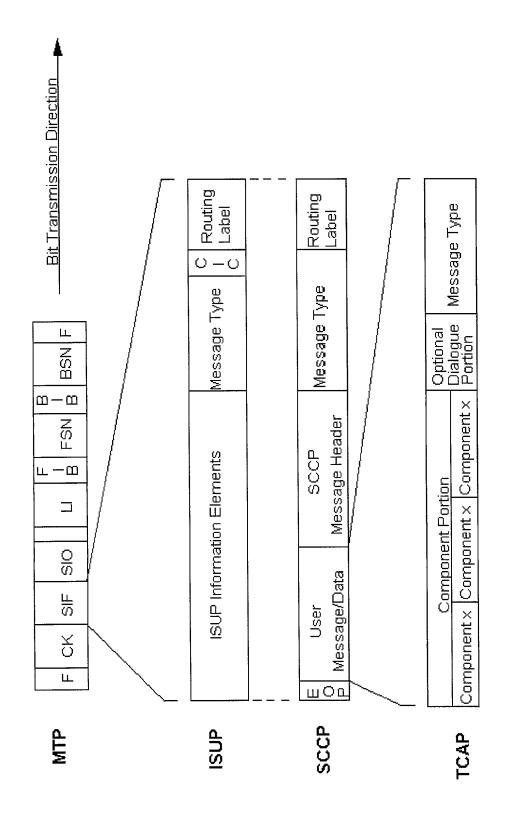


Figure 8

ISDN User Part Message Format Coding (LSSGR GR-606, Iss. 3 11/99)

			1	9	Ŋ	4	က	2	~
Flag	Ą	0	_	-	_	-	~	~	0
Forward sequence Information	ш	BSN/ BIB		Back	Backward Sequence Number	edneu	ce Nun	her	
Backward Sequence Information	U	FSN/		Forw	Forward Sequence Number	ouenba	Numb)er	
Message length Indicator	0	Ŝ	Spare		Leng	Length Indicator	ator		
Service Information	Ш	National Network Opt	onal k Opt	ŽĒ	Mess Priority		U ATM (IS	MTP User Part (ISUP)	l _E
ı	•								
					Des	Destination Point Code	c 0		
:	 г								
Kouting Label	L								
					58	Ongination Point Code	⊏ ⊚		
	-			Signa	Signaling Link Selection	동 Sele	ction		
CIC	9		_	Circuit Identification Code	Identific	cation (Code	·	
Message Type	I			_	Message Type	ge Typ	o>		
ISUP Information Element	_			<u>10</u>	SUP Parameters	ametei	ប្រ		
Check Bits					Check Bits				
			1						

Figure 9

Name of ISUP Parameter Length Indicator Parameter	Parameter Content		•	•	•	Name of ISUP Parameter	Length Indicator Parameter	Parameter Content	
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Figure 10

Security Context
Security Context Length Indicator Parameter
Security Context Parameter Value

Figure 11

Security Context Values

Value	Meaning
 0	Not used.
-	Data Encryption Algorithm
2	Integrity Check
3	Message Code Authentication
4	Sequence, Timestamp and Identification

Figure 12

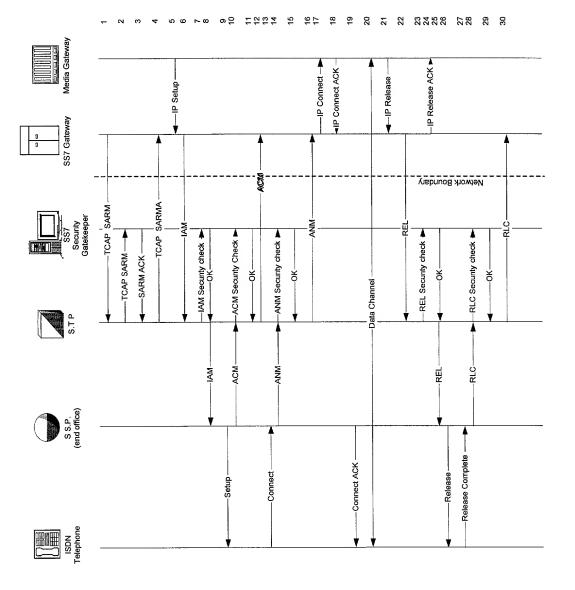


Figure 13

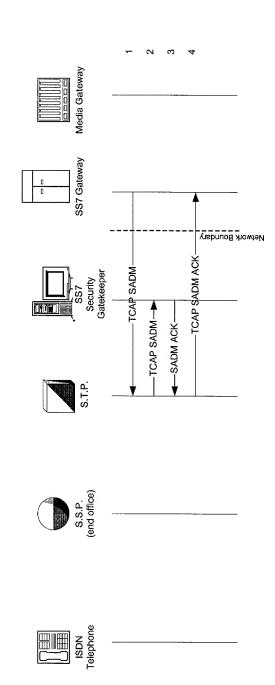


Figure 14

Initial Address Message

SIO and Routing Label
CIC Low-Order Octet
2-bits CIC High-Order 6-bits spare
Message Type = 1
Nature of Connection Indicators
Forward Call Indicator Bits HA
Forward Call Indicator Bits P1
Calling Party Category
Offset of 1st Mandatory Var. Parameter
Offset of 2nd Mandatory Var. Parameter
Offset of Start of Operational Part
Length Indicator of User Service Info
User Service Information No. of Octets = Length Indicator Value
Length Indicator of Called Party No.
Called Party Number No. of Octets = Length Indicator Value
Optional Parameter Code
Optional Parameter Length Indicator
Optional Parameter No. of Octets = Length Indicator Value
End of Optional Parameters Indicator

Address Complete Message

abel	ctet	der 6-bits	9 :	Bits H.A	r Bits PI	nal Part	Code	th Indicator	ter icator Value	-
SIO and Routing Label	CIC Low-Order Octet	2-bits CIC High-Order 6-bits	Message Type = 6	Backward Call Indicator Bits HA	Backward Call Indicator Bits PI	Offset to Start of Optional Part	Optional Parameter Code	Optional Parameter Length Indicator	Optional Parameter No. of Octets = Length Indicator Value	rotocipal gratamara Classific to be 1

Fig. 16

Answer Message

SIO and Routing Label CIC Low-Order Octet	2-bits CIC High-Order 6-bits Spare Message Type = 9	Offset to Start of Optional Part Optional Parameter Code	Optional Parameter Length Indicator	Optional Parameter No. of Octets = Length Indicator Value	End of Optional Parameters Indicator
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Fig. 17

Release Complete Message

SIO and Routing Label	CIC Low-Order Octet	CIC High-Order 6-bits	Message Type = 16
		2-bits spare	

Fig. 19

Release Message

SIO and Routing Label	CIC Low-Order Octet	S CIC High-Order 6-bits	Message Type = 12	Offset of 1st Mandatory Var. Parameter	Offset of Start of Operational Part	Length Indicator of Cause Indicators	Release Cause Indicator Parameter No. of Octets = Length Indicator Value	Optional Parameter Code	Optional Parameter Length Indicator	Optional Parameter No. of Octets = Length Indicator Value	End of Optional Parameters Indicator
		2-bits spare		Offset o	Offse	Lengt	Relea No. of C	0	Option	No. of C	End of

Fig 18

